

10/24/2001 W&H Substitute for Form PTO-SB/08A, which is a US PTO
Substitute for forms 1449/PTO and 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	09/498,046
Filing Date	February 4, 2000
First Named Inventor	Sabine Neirynck
Prior Art Unit	1648
Examiner Name	Stacy Brown Chen
Attorney Docket Number	VIB-103.0 (1796/97843)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number + Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
E1	5,871,747		2-16-1999	Gengoux-Sedlik et al. (English)	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code+Number+Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
E2	WO 94/06472		31 March 1994	Gengoux et al.-(Fermish)	abstract	only
E3	AU 49273 90		09 Aug 1990	Highfield et al.		
E4	WO 98/23735		04 June 1998	Mizzen et al.		

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ³
E5		Opposition Letter dated Sept. 4, 2006 to European Patent No. EP 0 996 717 B1	
E6		Notice of Opposition European Patent No. EP 0 996 717 B1 dated Sept. 5, 2006	
E7		Opposition Letter dated Sept. 5, 2006 to European Patent No. EP 0 996 717 B1	
E8		Opposition Letter dated Sept. 7, 2006 to European Patent No. EP 0 996 717 B1	
E9		Stepushkin et al., Vaccine, Vol. 13, No. 15, pp 1399-1402, 1995 "Protection of Mice Against Influenza A Virus Challenge by Vaccination with Baculovirus-Expressed M2 Protein"	
E10		Pouwels et al., Journal of Biotechnology 44 (1996) 183-192 "The Potential of Lactobacillus as a Carrier for Oral Immunization: Development and Preliminary Characterization of Vector Systems for Targeted Delivery of Antigens"	
E11A		(English version) Inseritie Van Nucleoproteïne T-Cel Epitoop Van Het Influenza A Virus in Het M2-Hepatitis B Core Fusie-Eiwit, by Bart Bamps, Promotor: Professor Willy Min Jou, Begeleider: Sabine Neirynck, Laboratorium voor Moleculaire Biologie VIB, Universiteit GENT, Academiejaar 1996-1997, Academic Degree obtained July 2, 1997	
E11B		(Fermish version) Inseritie Van Nucleoproteïne T-Cel Epitoop Van Het Influenza A Virus in Het M2-Hepatitis B Core Fusie-Eiwit, by Bart Bamps, Promotor: Professor Willy Min Jou, Begeleider: Sabine Neirynck, Laboratorium voor Moleculaire Biologie VIB, Universiteit GENT, Academiejaar 1996-1997, Academic Degree obtained July 2, 1997	

Examiner Signature	Date Considered
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E12A	(English version) Een Expressieplasmide Leidend Tot De Presentatie Van Influenza M2 Eiwitopepen Op Het E. Coli Celoppervlak, by Sabine Neirynck, Promotor: Professor W. Fiers, Laboratorium voor moleculaire Biologie VIB, Rijksuniversiteit GENT, Academiejaar 1987-1988, Academic Degree obtained September 30, 1988
E12B	(Femish version) Een Expressieplasmide Leidend Tot De Presentatie Van Influenza M2 Eiwitopepen Op Het E. Coli Celoppervlak, by Sabine Neirynck, Promotor: Professor W. Fiers, Laboratorium voor moleculaire Biologie VIB, Rijksuniversiteit GENT, Academiejaar 1987-1988, Academic Degree obtained September 30, 1988
E13	Lamb, R.A. et al., "Influenza Virus M ₂ Protein is an Integral Membrane Protein Expressed on the Infected-Cell Surface," <i>Cell</i> 40:627-633 (1985).
E14	Charbit, A., et al., "Probing the Topology of a Bacterial Membrane Protein by Genetic Insertion of a Foreign Epitope, Expression at the Cell Surface," <i>EMBO J.</i> 5:3029-3037 (1986)
E15	Charbit, A., et al., Presentation of Two Epitopes of the preS2 Region of Hepatitis B Virus on Live Recombinant Bacteria, <i>J. Immunol.</i> , 139:1658-1664 (1987);
E16	Francis, M.J., et al., "Peptide Vaccines Based on Enhanced Immunogenicity of Peptide Epitopes Presented with T-Cell Determinants or Hepatitis B Core Protein." In: <i>Antibodies, Antigens, and Molecular Mimicry</i> , Methods in Enzymology Vol. 178, J.J. Lagone, editor, pages 659-676, Academic Press, Inc., New York (1989)
E17	Bonsuona, G.P., et al., "Recombinant Core Particles of Hepatitis B Virus Exposing Foreign Antigenic Determinants on Their Surface," <i>FEBS Letters</i> 259: 121-124 (1989);
E18	Clarke, B.E., et al., "Presentation and Immunogenicity of Viral Epitopes on the Surface of a Hybrid Hepatitis B Virus Core Particles Produced in Bacteria," <i>J. General Virology</i> 71: 1109-1117 (1990);
E19	Francis, M.J., et al., "Immunological Properties of Hepatitis B Core Antigen Fusion Proteins." <i>Proc. Natl. Acad. Sci.</i> 87:2545-2549 (1990);
E20	Clarke, B.E., et al., "Improved Immunogenicity of a Peptide Epitope After Fusion to Hepatitis B Core Protein," <i>Nature</i> 330:381-384 (1987);
E21	Brown, A.L., et al., "Foreign Epitopes in Immunodominant Regions of Hepatitis B Core Particles are Highly Immunogenic and Conformationally Restricted," <i>Vaccine</i> 9:595-601 (1991);
E22	von Brunn, A., et al., "Principal Neutralizing Domain of HIV-1 is Highly Immunogenic when Expressed on the Surface of Hepatitis B Core Particles," <i>Vaccine</i> 11:817-824 (1993);
E23	Pumpens, P., et al., "Hepatitis B Virus Core Particles as Epitope Carriers," <i>Infection and Immunity</i> 38:63-74 (1995);
E24	Zebedee, S.L., et al., "Characterization of the Influenza Virus M2 Integral Membrane Protein and Expression at the Infected-Cell Surface from Cloned cDNA," <i>J. Virology</i> 55:502-511 (1985);
E25	Zebedee, S.L., et al., "Influenza A Virus M2 Protein: Monoclonal Antibody Restriction of Virus Growth and Detection of M2 in Virions," <i>J. Virology</i> 62(8):2762-2772 (1988);
E26	Katz, J.M., et al., "Immune Mechanisms of Protection Induced by Vaccination of BALB/c Mice with Influenza A Virus M2 Protein," In: <i>Options for the Control of Influenza III</i> , Leo Brown, et al. (eds.), pages 837-843 Elsevier, B.V., (1996)
E27	Stepushkin, V.A., et al., "Protection of Mice Against Influenza A Virus Challenge by Vaccination with Baculovirus-Expressed M2 Protein," <i>Vaccine</i> 13:1399-1402 (1995);
E28	Treanor, J.J. et al., "Passively Transferred Monoclonal Antibody to the M2 Protein Inhibits Influenza A Virus Replication in Mice," <i>Journal of DS Virology</i> , 64(3):1375-1377 (1990)
E29	Black, R.A. et al. "Antibody Response to the M2 Protein of Influenza A Virus Expressed in Insect Cells", <i>Journal of General Virology</i> 74:143-146 (1993)
E30	Hongo, S., et al., "Characterization of a Second Protein (CM2) Encoded by RNA Segment 6 of Influenza C Virus," <i>Journal of Virology</i> 71(4):2786-2792 (Apr. 1997)
E31	Milich, D.R. et al., "The Hepatitis Nucleocapsid as a Vaccine Carrier Moiety", <i>An NY Acad Sci</i> 754: 187-201 (1995)

Examiner Signature	Date Considered
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E32	R. Ulrich, "Core Particles of Hepatitis B Virus as Carrier for Foreign Epitopes", <i>Advances in Virus Research</i> 50:141-182 (1998)
E33	Cox et al., "Identification of Sequence Changes in the Cold-Adapted, Live Attenuated Influenza Vaccine Strain, A/Ann Arbor/6/60 (H2N2)", <i>Virology</i> 167:554-567 (1988)
E34	Allen et al., "Influenza Virus RNA Segment 7 Has the Coding Capacity for Two Polypeptides", <i>Virology</i> , 107:548-551 (1980)
E35	EMBL-U-02084 Reports: Influenza A Virus
E36	McEwen, J. et al. (1992), "Synthetic Recombinant Vaccine Expressing Influenza Haemagglutinin Epitope in <i>Salmonella</i> Flagellin Leads to Partial Protection in Mice" <i>Vaccine</i> , 10(6):405-411 (1992)
E37	Levi, R. and Aron, R. "Synthetic Recombinant Influenza Vaccine Induces Efficient Long-Term Immunity and Cross-Strain Protection, <i>Vaccine</i> , 14(1):85-92 (1996)
E38	Wells, J.M. et al. "Lactococcus Lactis: High-level Expression of Tetanus Toxin Fragment C and Protection Against Lethal Challenge", <i>Molecular Microbiology</i> , 8(6):1155-1162 (1993)
E39	Kovacsics-Banowski, M. et al., Efficient Major Histocompatibility Complex Class I Presentation of Exogenous Antigen Upon Phagocytosis by Macrophages" <i>PNAS</i> , 90:4942-4946 (1993)

Examiner Signature	/Stacy B. Chen/	Date Considered	02/14/2008
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